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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,088	12/28/2001	Henrik Niklasson	Goteb.6036	3903
7590	03/22/2005		EXAMINER	
Samuels, Gauthier & Stevens LLP Suite 3300 225 Franklin Street Boston, MA 02110			DALEY, CHRISTOPHER ANTHONY	
			ART UNIT	PAPER NUMBER
			2111	

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/035,088	NIKlasson, HENRIK	
	Examiner	Art Unit	
	Christopher A Daley	2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-22 is/are pending in the application.
- 4a) Of the above claim(s) 1 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 2 – 22 are pending. Claim 1 cancelled.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 14, 18 - 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Green et al (US6111888), herein referred to as Green.
4. As to claims 21 and 22, Green discloses an arrangement and a method for controlling a plurality of controllable devices (101 - 103 of Figure 1) connected to at least one common bus (104), where the arrangement comprises at least one input member (102) and at least one output member (101) interconnected through the common bus (104), each input and output member having at least one input terminal and at least one output terminal (Figure 1 shows a bus coupling the devices (i.e. terminals), respectively,

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each input/output terminal having an unique identity(The 11 bit identifier in the CAN protocol is used to identify each device in the system (Col. 6, lines 37 – 44)),

the input member (102) being arranged to receive a control signal from at least one control arrangement connected to the at least one input terminal of the input member(Green teaches of a sensor supplying input to microprocessor 112 of member (102). Each member (such as node 102) is assigned a unique address (Col. 6 lines 7 – 19, Col. 6. lines 60- 61).

The control signal generated from the sensor stimulus is sent by the microprocessor (112) to the CAN controller (111). The CAN controller (111), does bus arbitration (it knows addresses of all the devices on the network and their priority value and transmits the signal to the transceiver (110) that is coupled to the CAN bus (104) and to the CAN controller (111)). With the identity of the destination given in the identification field, the signal is routed to the appropriate device, (Col. 5, lines 57 – 65, Col. 6, lines 37 - 44))),

the control signal generating an action signal comprising an address corresponding to an unique identity of an output terminal of the output member connected to at least one of the controllable devices (The microprocessor (112) generates the action signal from the sensor stimulus. Said processor communicates with the CAN controller the requisite information over bus 114. This is transmitted to the CAN transceiver over bus 113, Col. 5, lines 58 -65)),

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where the action signal is provided on the common bus (104) by the input member (110 of 102) to be received by the output member (105 of 101) (The CAN transceiver couples the signal to the common bus (104) along with the identifier field information and the signal destination (Col. 6, lines 9 – 11)).

5. As to claims 2 and 5, Green discloses the common bus is a CAN-bus (Bus 104 of Figure 1 is CAN BUS. The reference to D is focused on the protocol used in this application (Col. 7, lines 25 - 27).

6. As to claims 3 and 6, Green discloses a input or output member that comprises:

A control Unit – microprocessor (107)

A bus controller - CAN Controller (106),

Bus Driver - in CAN transceiver (105)

Memory unit - in microprocessor (107)

An input or output signal controller - In CAN Transceiver (105), COL. 5, lines 55 - 57).

7. As to claims 4 and 7, Green discloses that the input and output controller unit of the device members consists of a microprocessor or other data processing arrangement (The processor, CAN Controller (106) performs the data processing functions of message formatting, error correction, and message arbitration, COL. 6, lines 20 – 22).

8. As to claim 8, Green teaches that the output bus controller is a CAN-bus controller and the bus driver is a CAN-bus driver (Green discloses the use of controller Motorola microprocessor MC68HC05 and bus driver, Philips 82C250, Col. 5, lines 40 – 53).

9. As to claim 9, Green discloses the use of the Philips 82C250 CAN transceiver (COL. 5, line 53) which specifies that at least one input terminal of the input member is so provided that they alter between an input and output terminal state (The Philips 82C250 data sheet shows signal CANH, CANL being bi-directional, Figure 1).

10. As to claim 10, Green discloses the use of the Philips 82C250 CAN transceiver (COL. 5, line 53) that teaches the input/output member comprises a number of input/output terminals and at least one of the input/output terminals is arranged as a common signal terminal. (The Philips 82C250 data sheet shows signal CANL being a common signal terminal, Figure 1).

11. As to claim 11, Green discloses the use of the Philips 82C250 CAN transceiver (COL. 5, line 53) that the common signal has different states, determining different states for the input terminal (The Philips 82C250 data sheet shows signal CANL having different states, Table 1).

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12. As to claim 12, Green discloses the use of the Philips 82C250 CAN transceiver (COL. 5, line 53) that each input terminal is connected to a normally open or normally closed switch, which state is determined by programming a control unit (The Philips 82C250 data sheet shows the signal connection state, Table 1).

13. As to claim 13, Green discloses the use of the Philips 82C250 transceiver (Col. 5, line 53) that the states of the input terminal are determined to bistable or pulse. (The Philips 82C250 data sheet shows the signal as being bistable, Table 1).

14. As to claim 14 Green discloses the use of the Philips 82C250 transceiver (Col. 5, line 53) that has at least one output terminal arranged such that it allows tuning a current limitation for the at least one output terminal. (The Philips 82C250 data sheet shows a current limiting protection feature Figure 1, page 4, second paragraph).

15. As to claim 18, Green discloses the use of the Philips 82C250 transceiver (Col. 5, line 53). This device has a excess current detection feature through its current limiting protection feature (The Philips 82C250 data sheet shows a current limiting protection feature Figure 1, page 4, second paragraph).

16. As to claim 19, Green discloses that the common bus is used to communicate control commands and status messages between the input and output members (Col. 8, lines 35 – 39).

17. As to claim 20, Green discloses an arrangement where several input members are connected to switch and indicator groups, which are interconnected by means of a common signal line (Input members (101), and (102) present signals to output member (103). Output member 103 combines and processes the may transmit result to another node over bus (104) (Col. 8, lines 17 – 22, 30 – 34).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 15 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green et al, and in view of Dauner et al (US6526460) herein referred to as Dauner.

20. As to claims 15, 16 and 17 Green does not explicitly teach that the input/output members connected to a common power supply line, and that this supply line is arranged in a loop or an arrangement where the power supply line is connected to a power supply arrangement at each end. However Dauner teaches of an arrangement in a motor vehicle where input/output members are connected to a common power supply

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line in a loop (See Figure 1), and an arrangement where the common supply line is connected to a power supply arrangement at each end (Figure 3). It would be obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of Dauner and Green because having the same power supply such as a battery for various system configurations in a vehicle would provide a unified supply system in the vehicle.

Response to Arguments

21. Applicant recite the details of claims 21, and 22 but fails to point out where the applied prior art of Green et al. '888 fails to meet the limitations of said claims. The examiner has mapped out in the office action above each claim, element, by element of the claim, and is thus limited in the response to the applicant, as the missing gaps have not pointed out by applicant.

22. The only argument made by the applicant was a broad one captured below. With respect to applicant's argument that Green does not anticipate either independent claims 21, and 22, as what the present invention solves the problem of connecting a controlling device, such as a switch, to a controllable device such as a light using a single bus connection. Invention does so by providing input and output members with one or several contacts, connectors, or input/outputs. One contact of the input device is assigned with a unique identity. When a signal is connected to one input contact, it is converted to the address of the specific output contact and transmitted over the bus to be received by an address input member having the contact with the unique identity.

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Green teaches that said invention is aimed at the industrial control industry, where there needs to be communication between control elements, such as sensor and control elements, COL. 1, lines 20 – 24. The applicant did not specify in claims 21 and 22, the type of controlling, and controllable devices as recited in the argument.

In particular, Green teaches of a method and a system of connecting a controlling device (101) to a controllable device (102) using a single bus connection 104. Green also teaches of the bus system being a CAN, which would have unique ID for the device or to identify the message to that device (COL. 6, lines 37 – 44). Thus device 101 can transmit information to device 102 via 104 under the control of the CAN controller 111, COL. 6, lines 19 – 20.

Applicant's arguments filed 12/20/2004 regarding independent claims 21, and 22 have been fully considered but they are not persuasive.

23. As to claims 2 – 14, 18 – 20, they are dependent on independent claim 22 and remain rejected.

24.

25. As to claims 15 – 17, applicant recites the teaching of Dauner, but fails to point out how Dauner does not address the deficiency of Green.

Conclusion

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A Daley whose telephone number is 571 272 3625. The examiner can normally be reached on 9 am. - 4p m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571 272 3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CAD

3/17/2005



TIM VO
PRIMARY EXAMINER